

DOCKET NO.: P04762
CLIENT NO.: NATI15-04762
CUSTOMER NO.: 23990

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : John E. Gavlik et al.
Application No. : 09/713,643
Filed : November 15, 2000
For : MULTITASKING MICROCONTROLLER FOR CONTROLLING
THE PHYSICAL LAYER OF A NETWORK INTERFACE CARD
AND METHOD OF OPERATION
Group No. : 2154
Examiner : Ashokkumar B. Patel

Mail Stop 16
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REQUEST FOR REFUND

Applicant hereby requests a refund in the amount of \$310.00 for the two month extension of time fee charged to Davis Munck Deposit Account No. 50-0208 on April 19, 2005. A copy of the Deposit Account Statement dated April 2005 is attached.

Applicants filed a Notice of Appeal on February 22, 2005 and a Request for Continued Examination in response to the Notice of Appeal on April 4, 2005 (copies attached). Therefore, no extension of time was necessary in connection with the filing of the Request for Continued Examination.

Please issue a credit in the amount of \$310.00 to Davis Munck Deposit Account No. 50-0208 for this overpayment.

Adjustment date: 12/8/2005 EEKURAY1
04/19/2005 RBROWN1 00000610 500208 09713643
01 FC:1252 310.00 CR

ATTORNEY DOCKET NO.: P04762
APPLICATION NO.: 09/713,643
PATENT

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: Dec 9, 2005


William A. Munck
Registration No. 39,308

P.O. Drawer 800889
Dallas, Texas 75380
Tel: (972) 628-3600
Fax: (972) 628-3616
E-mail: wmunck@davismunck.com

12/09/05

14:49

DAVIS MUNCK → 915712736500

NO. 293

001



A PROFESSIONAL CORPORATION
900 THREE GALLERIA TOWER
13155 NOEL ROAD
DALLAS, TEXAS 75240

TELEPHONE (972) 628-3600

FACSIMILE (972) 628-3616

Facsimile Cover Sheet

To: Deposit Account Branch

Fax: 571-273-6500

From: William A. Munck

Time: 1:26 PM

Date: December 9, 2005

Client/Matter: NATI15-04762

THIS FAX CONSISTS OF 32 PAGE(S) (INCLUDING THIS COVER SHEET).
IF THERE IS A PROBLEM IN RECEIVING THIS FAX, PLEASE CALL (972) 628-3600

Re: U.S. Patent Application No. 09/713,643

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DOCKET NO.: P04762
CLIENT NO.: NATI15-04762
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: : John E. Gavlik et al.
Application No. : 09/713,643
Filed : November 15, 2000
For : MULTITASKING MICROCONTROLLER FOR
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NETWORK INTERFACE CARD AND METHOD OF
OPERATION
Group No. : 2154
Examiner : Ashokkumar B. Patel

Mail Stop 16
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF TRANSMISSION BY FACSIMILE

Sir:

The undersigned hereby certifies that the following documents:

1. Request for Refund;
2. Copy of Request for Continued Examination with accompanying documents filed on April 4, 2005; and
3. Copy of Notice of Appeal with accompanying documents filed on February 22, 2005

relating to the above application were faxed to (571) 273-6500 on December 9, 2005.

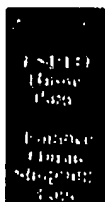
Date: Dec. 9, 2005

[Signature]
Faxer

P.O. Drawer 800889
Dallas, Texas 75380
Phone: (972) 628-3600
Fax: (972) 628-3616
E-mail: wmunck@davismunck.com

Deposit Account Statement

Page 1 of 2


**United States
Patent and
Trademark Office**
**Deposit Account Statement**

Requested Statement Month: April 2005
 Deposit Account Number: 500208
 Name: DAVIS MUNCK
 Attention: JOHN T MOCKLER
 Address: 900 THREE GALLERIA TOWER
 City: DALLAS
 State: TX
 Zip: 75240
 Country: UNITED STATES OF AMERICA

DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
04/01	7	PCT/US04/11587		9204	-\$138.00	\$3,048.1
04/05	165	11015739	2003.11003.BNO	1483	\$70.00	\$2,978.1
04/05	171	11015738	2003.11005.BN	1483	\$70.00	\$2,908.1
04/07	35	E-REPLENISHMENT		9203	-\$4,500.00	\$7,408.1
04/08	2	09890027	97-S152D1	1251	\$120.00	\$7,288.1
04/11	112	10910917	04-DS-082	1483	\$70.00	\$7,218.1
04/11	114	10910910	04-DS-084	1463	\$70.00	\$7,148.1
04/11	140	10810941	04-DS-083	1483	\$70.00	\$7,078.1
04/11	322	10837495	2004.03.003.WSO	8007	\$20.00	\$7,058.1
04/13	4	10279442	13039:213	1201	\$400.00	\$6,658.1
04/13	79	09500213	02-084CIP (ANS101-00012)	2201	-\$100.00	\$6,758.1
04/14	2	PCT/US04/28589	TRUL01-00007	1606	\$160.00	\$6,608.1
04/19	10	09713643	P04782-1504262	1252	\$310.00	\$6,298.1
04/20	2	09207554	STM-99-5	1252	\$320.00	\$5,978.1
04/20	10	10299949	P06364	1814	\$130.00	\$5,848.1
04/20	16	10447324	P05555	1814	\$130.00	\$5,718.1
04/20	18	10447211	P05564	1814	\$130.00	\$5,588.1
04/22	223	10836885	2003.10.015.WT0	8007	\$40.00	\$5,548.1
04/22	344	10836885	2003.10.015.WT0	8007	\$20.00	\$5,528.1
04/25	5	09821919	ANSI01-00008	2202	\$75.00	\$5,453.1
04/25	6	09821919	ANSI01-00008	2201	\$300.00	\$5,153.1
04/25	683	78815169	LEVE01-00002	7001	\$650.00	\$4,503.1
04/27	60	09370489	PHA 23,743	1251	-\$110.00	\$4,613.1
04/28	14	60666973	05-05-004 (UGSC01-05044)	1085	\$250.00	\$4,363.1
04/28	110	10463830	P05577	1814	\$130.00	\$4,233.1
04/28	111	10463830	P05577	1814	\$130.00	\$4,103.1

Mailed:

April 2005

In re. Application of: JOHN E. GAVLIK, ET AL.

Serial No.: 09/713,643

Filing Date: November 15, 2000

Title: MULTITASKING MICROCONTROLLER FOR CONTROLLING
THE PHYSICAL LAYER OF A NETWORK INTERFACE CARD
AND METHOD OF OPERATION

Docket No.: P04762

Client No.: NATI15-04762

The following documents were received in the U.S. Patent and Trademark Office on the date stamped below:

- 1) Certificate of Mailing by First Class Mail;
- 2) Amendment and Response to Office Action;
- 3) Request for Continued Examination Transmittal;
- 4) Fee Transmittal for FY 2005 (in duplicate); and
- 5) Check in the amount of \$790.00 for the RCB filing fee.

ATTORNEY DOCKET NO. P04762
CLIENT NO. NAT115-04762
Customer No. 23990

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: : JOHN E. GAVLIK, ET AL.
U.S. Serial No. : 09/713,643
Filed : November 15, 2000
For : MULTITASKING MICROCONTROLLER FOR
CONTROLLING THE PHYSICAL LAYER OF A NETWORK
INTERFACE CARD AND METHOD OF OPERATION
Group No. : 2154
Examiner : Ashokkumar B. Patel

MAIL STOP RCE
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

The undersigned hereby certifies that the following documents:

1. Request for Continued Examination Transmittal;
2. Amendment and Response to Office Action;
3. Fee Transmittal for FY 2005 (in duplicate);
4. Check in the amount of \$790.00 for the RCE filing fee; and
5. Postcard Receipt

relating to the above application, were deposited as "First Class Mail" with the United States Postal Service, addressed to: MAIL STOP RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313, on April 4, 2005.

Date: April 4, 2005

Kathy Harrison
Mailer

Date: March 31, 2005

William A. Munck
William A. Munck
Reg. No. 39,308

P.O. Drawer 800889
Dallas, Texas 75380
Phone: (972) 628-3600
Fax: (972) 628-3616
E-mail: wmunck@davismunck.com

12/09/05 14:49 DAVIS MUNCK → 915712736500

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A PROFESSIONAL CORPORATION

48139

ENDOR:	CHECK NO:
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57371	NAT115-4762	3/29/2005	790.00	790.00	

Request for Continued Examination (RCE) Transmittal Fee

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DAVIS MUNCK, P.C.
PROFESSIONAL CORPORATION
300 THREE GALLERY TOWER
13755 NOEL ROAD
DALLAS, TEXAS 75240
(972) 628-3600

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03/30/2005

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Request for Continued Examination (RCE) Transmittal Fee

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PTO/38/39 (09-03)

Approved for use through 07/31/2008. OMB 0531-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Request for Continued Examination (RCE) Transmittal

Address to:
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Application Number	09/713,843
Filing Date	November 15, 2000
First Named Inventor	JOHN E. GAVLIK
Art Unit	2154
Examiner Name	ASHOKKUMAR B. PATEL
Attorney Docket Number	P04762 (NAT115-04762)

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ii. ☐ Other _____
- b. ☒ Enclosed
- i. ☒ Amendment/Reply
- ii. ☐ Affidavit(s) Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☒ Certificate of Mailing; postcard receipt; Other Fee Transmittal for FY 2005 (in duplicate)

2. Miscellaneous

- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(f) required)
- b. ☐ Other _____

3. Fees

This RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 50-0208

- a. ☒ RCE fee required under 37 CFR 1.17(e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☐ Other _____
- b. ☒ Check in the amount of \$ 780.00 enclosed
- c. ☐ Payment by credit card (Form PTO-2038 enclosed)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print/Type)	William A. Munck	Registration No. (Attorney/Agent)	39,308
Signature	<i>William A. Munck</i>	Date	March 31, 2005

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Name (Print/Type)	Kathleen Newsome
Signature	
Date	

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (12-04)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEE TRANSMITTAL**
For FY 2005☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$)**790.00****Complete if Known**

Application Number	09/713,643
Filing Date	November 15, 2000
First Named Inventor	John E. Gavlik
Examiner Name	Ashokkumar B. Patel
Art Unit	2154
Attorney Docket No.	P04762 (NAT113-04762)

METHOD OF PAYMENT (check all that apply)

- ☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____
- ☒ Deposit Account Deposit Account Number: 50-0208 Deposit Account Name: Davis Munck, P.C.
- For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)
- ☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
- ☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2036.

FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fees Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fees Paid (\$)
- 20 or HP =	x					
HP = highest number of total claims paid for, if greater than 20						
Indep. Claims	Extra Claims	Fee (\$)	Fees Paid (\$)			
- 3 or HP =	x					
HP = highest number of independent claims paid for, if greater than 3						

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(e).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fees Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x		

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: Request for Continued Examination Transmittal Fee

Fees Paid (\$)

\$790.00

SUBMITTED BY

Signature	<i>William A. Munck</i>	Registration No. (Attorney/Agent)	39,308	Telephone	972-628-3600
Name (Print/Type)	William A. Munck			Date	March 31, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

DOCKET NO. P04762
CLIENT NO. NATI15-04762
Customer No. 23990

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: John E. Gavlik, et al.
Serial No.: 09/713,643
Filed: November 15, 2000
For: MULTITASKING MICROCONTROLLER FOR
CONTROLLING THE PHYSICAL LAYER OF A NETWORK
INTERFACE CARD AND METHOD OF OPERATION
Group No.: 2154
Examiner: Ashokkumar B. Patel

MAIL STOP RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the Office Action dated September 22, 2004 and the Notice of Appeal filed on February 22, 2005, the Applicants respectfully request continued examination of the above-identified patent application.

Please amend the above-identified patent application as follows.

DOCKET NO. P04762
SERIAL NO. 09/713,643
PATENT

IN THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) An apparatus for controlling a physical layer interface of a network interface card in real time, said apparatus comprising:

a first memory capable of storing a multitasking control program, said multitasking control program comprising a main routine and a plurality of subroutines sequentially callable by said main routine;

a second memory capable of storing a plurality of multitasking vectors associated with said multitasking control program; and

a microcontroller capable of executing said multitasking control program;

wherein program execution control is transferred from said main routine to a first one of said plurality of subroutines when said first subroutine is called by said main routine; [[and]]

wherein said first subroutine, upon encountering a decision point in said first subroutine that is not yet capable of being decided, updates a first one of said plurality of multitasking vectors associated with said first subroutine with an address of said decision point and transfers program execution control back to said main routine; and

wherein the main routine, after sequentially transferring program execution control to each remaining subroutine in the plurality of subroutines, again transfers program execution control from the main routine to the first subroutine at the address of the decision point contained in the first multitasking vector.

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2. (Currently Amended) The apparatus as set forth in Claim 1 wherein said main routine uses ~~said first~~ other multitasking vectors to subsequently and sequentially transfer program execution control back to ~~said first~~ each remaining subroutine at ~~[[said]]~~ an address of ~~said first~~ a decision point contained in each of the other multitasking vectors.

3. (Previously Presented) The apparatus as set forth in Claim 2 wherein said first memory comprises a read-only memory (ROM) associated with said microcontroller.

4. (Previously Presented) The apparatus as set forth in Claim 3 wherein said second memory comprises a random access memory (RAM) associated with said microcontroller.

5. (Previously Presented) The apparatus as set forth in Claim 4 wherein said ROM and said RAM are internal to said microcontroller.

6. (Previously Presented) The apparatus as set forth in Claim 4 wherein at least one of said ROM and said RAM comprises an external device coupled to said microcontroller.

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7. (Previously Presented) The apparatus as set forth in Claim 2 wherein said first memory and said second memory comprise a random access memory (RAM) associated with said microcontroller.

8. (Previously Presented) The apparatus as set forth in Claim 7 wherein said RAM comprises an external device coupled to said microcontroller.

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9. (Currently Amended) A processing system comprising:

a data processor; and

a network interface card for coupling said processing system to a data network, said network interface card comprising an apparatus for controlling a physical layer interface of said network interface card in real time, said apparatus comprising:

a first memory capable of storing a multitasking control program, said multitasking control program comprising a main routine and a plurality of subroutines sequentially callable by said main routine;

a second memory capable of storing a plurality of multitasking vectors associated with said multitasking control program; and

a microcontroller capable of executing said multitasking control program;

wherein program execution control is transferred from said main routine to a first one of said plurality of subroutines when said first subroutine is called by said main routine; [[and]]

wherein said first subroutine, upon encountering a decision point in said first subroutine that is not yet capable of being decided, updates a first one of said plurality of multitasking vectors associated with said first subroutine with an address of said decision point and transfers program execution control back to said main routine; and

wherein the main routine, after sequentially transferring program execution control to each remaining subroutine in the plurality of subroutines, again transfers program execution control from the main routine to the first subroutine at the address of the decision point contained in the first multitasking vector.

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10. (Currently Amended) The processing system as set forth in Claim 9 wherein said main routine uses ~~said first~~ other multitasking vectors to subsequently and sequentially transfer program execution control back to ~~said first~~ each remaining subroutine at an address of said first a decision point contained in each of the other multitasking vectors.
11. (Previously Presented) The processing system as set forth in Claim 10 wherein said first memory comprises a read-only memory (ROM) associated with said microcontroller.
12. (Previously Presented) The processing system as set forth in Claim 11 wherein said second memory comprises a random access memory (RAM) associated with said microcontroller.
13. (Previously Presented) The processing system as set forth in Claim 12 wherein said ROM and said RAM are internal to said microcontroller.
14. (Previously Presented) The processing system as set forth in Claim 12 wherein at least one of said ROM and said RAM comprises an external device coupled to said microcontroller.

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SERIAL NO. 09/713,643
PATENT

15. (Previously Presented) The processing system as set forth in Claim 10 wherein said first memory and said second memory comprise a random access memory (RAM) associated with said microcontroller.

16. (Previously Presented) The processing system as set forth in Claim 15 wherein said RAM comprises an external device coupled to said microcontroller.

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17. (Currently Amended) For use in a network interface card having a physical layer interface controllable by a microcontroller embedded therein, a method of operating the microcontroller comprising the steps of:

storing a multitasking control program, the multitasking control program comprising a main routine and a plurality of subroutines sequentially callable by the main routine;

storing a plurality of multitasking vectors associated with the multitasking control program; and

executing the multitasking control program in a microcontroller;

transferring program execution control from the main routine to a first one of the plurality of subroutines when the first subroutine is called by the main routine;

when the first subroutine encounters a decision point in the first subroutine that is not yet capable of being decided, updating a first one of the plurality of multitasking vectors associated with the first subroutine with an address of the decision point; [[and]]

transferring program execution control back to the main routine; and

after sequentially transferring program execution control from the main routine to each remaining subroutine in the plurality of subroutines, again transferring program execution control from the main routine to the first subroutine at the address of the decision point contained in the first multitasking vector.

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18. (Currently Amended) The method as set forth in Claim 17 further comprising the step of using ~~the first~~ other multitasking vectors to subsequently and sequentially transfer program execution control from the main routine back to ~~the first~~ each remaining subroutine at ~~[[the]]~~ an address of ~~the first~~ a decision point contained in each of the other multitasking vectors.

19. (Previously Presented) The method as set forth in Claim 18 wherein the first memory comprises a read-only memory (ROM) associated with the microcontroller.

20. (Previously Presented) The method as set forth in Claim 19 wherein the second memory comprises a random access memory (RAM) associated with the microcontroller.

21. (Previously Presented) The method as set forth in Claim 20 wherein the ROM and the RAM are internal to the microcontroller.

22. (Previously Presented) The method as set forth in Claim 20 wherein at least one of the ROM and the RAM comprises an external device coupled to the microcontroller.

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REMARKS

Claims 1-22 were pending in this application.

Claims 1-22 have been rejected.

Claims 1, 2, 9, 10, 17, and 18 have been amended as shown above.

Claims 1-22 remain pending in this application.

Reconsideration and full allowance of Claims 1-22 are respectfully requested.

I. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 1-22 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,182,238 to Cooper ("Cooper") in view of U.S. Patent No. 4,530,051 to Johnson et al. ("Johnson"). This rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP* § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)). If the Patent Office does not produce a *prima facie* case of unpatentability,

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then without more the applicant is entitled to grant of a patent. (*In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (MPEP § 2142).

Claims 1, 9, and 17 have been amended to recite that a "plurality of subroutines" are "sequentially callable" by a "main routine." Claims 1, 9, and 17 have also been amended to recite that the main routine, after "sequentially transferring program execution control" to "each remaining subroutine in the plurality of subroutines," again transfers "program execution control" to the "first subroutine" at an "address of [a] decision point contained in [a] first multitasking vector."

The Office Action acknowledges that *Cooper* fails to disclose a "multitasking control program" that includes a "main routine" and a "plurality of subroutines." (Office Action, Page 5.

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Last paragraph). Based on this acknowledgement, *Cooper* also fails to disclose that a "plurality of subroutines" are "sequentially callable" by a "main routine" as recited in Claims 1, 9, and 17.

The Office Action also acknowledges that *Cooper* fails to disclose a "main routine" calling a "first subroutine," where the first subroutine updates a "first multitasking vector" with an "address" of a "decision point" that cannot be decided and transfers program execution control back to the main routine. (*Office Action, Page 5, Last paragraph – First, paragraph*). Based on this acknowledgement, *Cooper* also fails to disclose that a main routine, after transferring program execution control to the "first subroutine" and then sequentially to "each remaining subroutine in the plurality of subroutines," again transfers program execution control to the "first subroutine" at an "address of the decision point contained in the first multitasking vector" as recited in Claims 1, 9, and 17.

Johnson also fails to disclose, teach, or suggest these elements of Claims 1, 9, and 17.

Johnson recites that a "home process" executing on a "home processor" can invoke a "remote process" on a "remote processor." (*Abstract*). The "home process" may operate in various states, including states in which the "home process" is waiting for an action to occur or a message to be received. (*Col. 7, Lines 11-62*). For example, the "home process" may call a "remote process" and then enter a dormant state, and the "home process" remains in the dormant state until the "home process" receives a return message from the "remote process." (*Col. 7, Line 63 – Col. 8, Line 28*). The "remote process" may itself invoke execution of other processes and enter a dormant state. (*Col. 10, Lines 27-63*).

Johnson simply recites that a "home process" on one processor may invoke a "remote

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process" on another processor, and the "remote process" may itself invoke functions on a different processor. However, *Johnson* lacks any mention that the remote processes are "sequentially callable" by the home process, where a first "remote process" is called and then all remaining "remote processes" are sequentially called before the first "remote process" is called again. As a result, *Johnson* fails to disclose, teach, or suggest a "main routine" and a "plurality of subroutines sequentially callable" by the "main routine," where "program execution control" is sequentially transferred to a first subroutine, to each remaining subroutine, and again to the first subroutine as recited in Claims 1, 9, and 17.

For these reasons, the proposed *Cooper-Johnson* combination fails to disclose, teach, or suggest all elements of Claims 1, 9, and 17 (and their dependent claims). Accordingly, the Applicants respectfully request withdrawal of the § 103 rejection and full allowance of Claims 1-22.

II. CONCLUSION

The Applicants respectfully assert that all pending claims in this application are in condition for allowance and respectfully request full allowance of the claims.

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PATENT

SUMMARY

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at wmunck@davismunck.com.

The Applicants have included the appropriate fee to cover the cost of a REQUEST FOR CONTINUED EXAMINATION. The Commissioner is hereby authorized to charge any additional fees connected with this communication (including any extension of time fees) or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date:

April 4, 2005



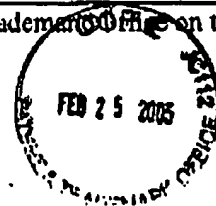
William A. Munck
Registration No. 39,308

P.O. Drawer 800889
Dallas, Texas 75380
(972) 628-3600 (main number)
(972) 628-3616 (fax)
E-mail: wmunck@davismunck.com

Mailed: February 22, 2005
In re. Application of: JOHN E. GAVLIK, ET AL.
Serial No.: 09/713,643
Filing Date: November 15, 2000
Title: MULTITASKING MICROCONTROLLER FOR CONTROLLING
THE PHYSICAL LAYER OF A NETWORK INTERFACE CARD
AND METHOD OF OPERATION
Docket No.: P04762
Client No.: NATI15-04762

The following documents were received in the U.S. Patent and Trademark Office on the date stamped below:

- 1) Certificate of Mailing by First Class Mail;
- 2) Notice of Appeal;
- 3) Petition For Extension of Time - one month (in duplicate);
- 4) Check in the amount of \$620.00 for (Notice of Appeal filing fee (\$500.00) and one month extension of time fee (\$120.00); and
- 5) Fee Transmittal for FY 2005 (in duplicate).



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MAR 21 2005

DOCKET NO.: P04762
CLIENT NO.: NATI13-04762
Customer No. 23990

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : JOHN E. GAVLIK, ET AL.
Serial No. : 09/713,643
Filed : November 15, 2000
For : MULTITASKING MICROCONTROLLER FOR CONTROLLING
THE PHYSICAL LAYER OF A NETWORK INTERFACE CARD
AND METHOD OF OPERATION
Group No. : 2154
Examiner : Ashokkumar B. Patel

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

The undersigned hereby certifies that the following documents:

1. Postcard receipt;
2. Notice of Appeal;
3. Petition For Extension of Time - one month (in duplicate);
4. Check in the amount of \$620.00 for (Notice of Appeal filing fee \$500.00 and one month extension of time fee (\$120.00); and
4. Fee Transmittal for FY 2005 (in duplicate).

relating to the above application, were deposited as "First Class Mail" with the United States Postal Service, addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on February 22, 2005.

Date: FEBRUARY 22, 2005

Date: FEB. 22, 2005

P.O. Drawer 800889
Dallas, Texas 75380
Phone: (972) 628-3600

Kathleen Newsome
Mailer
William A. Munck
William A. Munck
Reg. No. 39,308

PTO/SB/17 (10-04v2)

Approved for use through 07/31/2008. OMB 0851-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL
for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27TOTAL AMOUNT OF PAYMENT (\$)**620.00****Complete If Known**

Application Number	09/713,643
Filing Date	November 15, 2000
First Named Inventor	John E. Gavlik
Examiner Name	Ashokkumar B. Patel
Art Unit	2154
Attorney Docket No.	P04762 (NAT115-04762)

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit Account Number
Deposit Account Name

50-0208

Davis Munck, P.C.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 700	2001 365	Utility filing fee	
1002 350	2002 175	Design filing fee	
1003 550	2003 275	Plant filing fee	
1004 780	2004 395	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$)**-0-****2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	EXTRA CLAIMS	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 16	2202 8	Claims in excess of 20
1201 88	2201 44	Independent claims in excess of 3
1203 300	2203 150	Multiple dependent claim, if not paid
1204 88	2204 44	** Reissue independent claims over original patent
1205 16	2205 8	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)**-0-**

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	2053 65	Non-English specification	
1812 2,520	2812 1,260	For filing a request for <i>ex parte</i> reexamination	
1804 920*	2804 460*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	2805 920*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	\$120.00
1252 430	2252 215	Extension for reply within second month	
1253 980	2253 490	Extension for reply within third month	
1254 1,530	2254 765	Extension for reply within fourth month	
1255 2,080	2255 1,040	Extension for reply within fifth month	
1401 340	2401 170	Notice of Appeal	\$500.00
1402 340	2402 170	Filing a brief in support of an appeal	
1403 300	2403 150	Request for oral hearing	
1451 1,510	2451 755	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,370	2453 685	Petition to revive - unintentional	
1501 1,370	2501 685	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 680	2503 340	Plant issue fee	
1460 130	2460 65	Petitions to the Commissioner	
1807 80	2807 40	50 Processing fee under 37 CFR 1.17(a)	
1808 180	2808 90	180 Submission of Information Disclosure Stmt	
8021 40	28021 20	40 Recording each patent assignment per property (times number of properties)	
1809 780	2809 390	385 Filing a submission after final rejection (37 CFR 1.129(a))	
1810 780	2810 390	For each additional invention to be examined (37 CFR 1.129(b))	
1801 780	2801 390	Request for Continued Examination (RCE)	
1802 900	2802 450	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**620.00****SUBMITTED BY**

Name (Print/Type)

William A. Munck

Registration No.

39,308

(Complete if applicable)

Telephone 972-628-3600

Signature

[Signature]

Date

Feb. 23, 2005

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

DOCKET NO. P04762 (NAT11S-04762)
Customer No. 23990

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : JOHN E. GAVLIK, ET AL.
Serial No. : 09/713,643
Filed : November 15, 2000
For : MULTITASKING MICROCONTROLLER FOR CONTROLLING
THE PHYSICAL LAYER OF A NETWORK INTERFACE CARD
AND METHOD OF OPERATION
Group No. : 2154
Examiner : Ashokkumar B. Patel

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

PETITION FOR EXTENSION OF TIME

Applicant respectfully requests a one (1) month extension of time for filing a Notice of Appeal in response to the final Office Action mailed September 22, 2004 (and the Advisory Action mailed January 24, 2005).

The Applicants believe that only a one (1) month extension of time is required.

In response to the Office Action dated September 22, 2004, the Applicants filed an AMENDMENT AND RESPONSE on November 22, 2004. The Applicants therefore responded to the

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U.S. SERIAL NO. 09/713,643
PATENT

Office Action within two months of the mailing date of the Office Action. The Examiner issued an Advisory Action on January 24, 2005, which was not within three months from the mailing date of the Office Action.

According to the Office Action and pursuant to MPEP § 706.07(f), the shortened statutory period for replying to the Office Action expires three months from the date of the final rejection or on the mailing date of an Advisory Action, whichever is later. As a result, the shortened statutory period for replying to the Office Action expired on January 24, 2005 (the mailing date of the Advisory Action). The Applicants therefore only require a one (1) month extension of time.

The response period expired on January 20, 2005, and if this Petition for Extension of Time is granted, the new response date will be February 20, 2005.

A check in the amount of \$620.00 is enclosed for the Notice of Appeal filing fee (\$500.00) and one (1) month extension of time fee (\$120.00). The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

12/09/05

14:49

DAVIS MUNCK → 915712736500

NO. 293

030

ATTORNEY DOCKET NO. P04762 (NAT115-04762)
U.S. SERIAL NO. 09/713,643
PATENT

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: Feb 22, 2005

William A. Munck

William A. Munck
Registration No. 39,308

P.O. Drawer 800889
Dallas, Texas 75380
Tel: (972) 628-3600
FAX: (972) 628-3616
email: wmunck@davismunck.com

DOCKET NO.: P04762
CLIENT NO.: NATI15-04762
Customer No. 23990

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: JOHN E. GAVLIK, ET AL.
Serial No.: 09/713,643
Filed: November 15, 2000
For: MULTITASKING MICROCONTROLLER FOR
CONTROLLING THE PHYSICAL LAYER OF A
NETWORK INTERFACE CARD AND METHOD OF
OPERATION
Group No.: 2154
Examiner: Ashokkumar B. Patel

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

NOTICE OF APPEAL

The Applicant hereby appeals to the Board of Appeals from the decision of the Examiner in the Office Action dated September 22, 2004, finally rejecting Claims 1-22.

A check in the amount of \$620.00 is enclosed in payment for the Notice of Appeal filing fee (\$500.00) and the one month extension of time fee (\$120.00).

The Applicants believe that only a one (1) month extension of time is required with this NOTICE OF APPEAL.

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SERIAL NO. 09/713,643
PATENT

In response to the Office Action dated September 22, 2004, the Applicants filed an AMENDMENT AND RESPONSE on November 22, 2004. The Applicants therefore responded to the Office Action within two months of the mailing date of the Office Action. The Examiner issued an Advisory Action on January 24, 2005, which was not within three months from the mailing date of the Office Action.

According to the Office Action and pursuant to MPEP § 706.07(f), the shortened statutory period for replying to the Office Action expires three months from the date of the final rejection or on the mailing date of an Advisory Action, whichever is later. As a result, the shortened statutory period for replying to the Office Action expired on January 24, 2005 (the mailing date of the Advisory Action). The Applicants therefore only require a one (1) month extension of time.


The Commissioner is hereby authorized to charge any additional fees connected with this communication (including any additional extension of time fees) or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: Feb 22, 2005

P.O. Drawer 800889
Dallas, Texas 75380
Tel: (972) 628-3600
Fax: (972) 628-3616
E-mail: wmunck@davismunck.com



William A. Munck
Registration No. 39,308

ATTENTION ATTENTION ATTENTION

Method of Refund:

☐ ACH/EFT

☐ Credit Card

☒ Deposit Account # 50-0208

☐ Treasury Check

Patent/TM/App/Serial # 09,713,643

Program Area Teek Center 2154

Date Processed 12-22-05

ATTENTION ATTENTION ATTENTION